SYNCHRONIZATION
A TRAINING PROBLEM

CAPTAIN PETER A. HANSEN

Many of the artillery units training at the National Training Center (NTC) have difficulty synchronizing fires. That is, they have trouble coordinating their efforts with those of the infantry and armor units.

The major problem with synchronization of fires is that artillery and maneuver forces train separately, not together. Usually, when artillery units shoot actual artillery rounds, they are out of sight and out of mind so far as the maneuver forces are concerned. And when artillery units do train with maneuver forces, the training normally involves only their fire support sections.

Another problem is that during simulated battles, artillery firing units play "notionally" or only in part. As a result, maneuver commanders develop unrealistic expectations about the capabilities of their fire support units. In addition, when dealing with fire support, maneuver commanders often depend upon the fire support officer to keep everything straight while offering little or no guidance. Consequently, these fire support people often plan artillery fires that do not adequately support the plans of the maneuver units.

When forward observers (FOs) and fire direction center (FDC) personnel do train together, it is not in an integrated environment. They shoot one mission at a time, under the control of a battalion FDC. Forward observers shoot from known observation points into known impact areas onto known targets. Batteries shoot from known firing points into static impact areas free of battlefield clutter.

Infantry and armored forces usually train separately on their firing ranges or in their maneuver areas. Artillery units do not get practice in firing actual rounds against simulated enemy maneuver forces who are supposedly battling friendly maneuver forces. Thus, artillery units do not train to fire live rounds against realistic enemy target arrays in conjunction with maneuver plans. And maneuver commanders training separately from the firing artillery units do not adequately synchronize their fires.

One of the problems is that our current ARTEPs (Army training and evaluation programs) actually promote unsynchronized training. Thus, there is a different ARTEP for each level of command and each type of unit. Although the Army does not intend its ARTEPs to be branch pure, units tend to execute them as if they were.

Usually, artillery units construct their ARTEPs so that artillerymen evaluate or test other artillerymen. For certain tasks, though, maneuver commanders might be better judges. Specifically, maneuver commanders could judge whether the fire support plans complement their maneuver plans.

Even when maneuver commanders do involve themselves in artillery ARTEPs, the fire support plans often are not fully evaluated, because artillerymen do not actually carry out the fire support plans (with actual rounds or simulated actions down to the gun line) in conjunction with maneuver operations. And if they do not, neither the maneuver commanders nor the artillerymen will ever know whether the plans they made would actually work on the battlefield. In short, maneuver commanders will not learn what they can realistically expect from artillery units; artillerymen will not know whether the fire support plans they have developed can complement maneuver operations.

PROBLEM

Since fire plans are not realistically evaluated during ARTEPs or verified with real rounds, fire support personnel tend to develop unmanageable plans. A common problem at the NTC is the large number of artillery targets that are planned. During one defensive battle, for example, a supporting direct support artillery battalion received 119 planned targets—14 group targets, six FASCAM targets, two series, 44 point targets, and five final protective fires. Because of the number of targets involved, the artillery battalion was unable to resolve a priority of engagement, and it fired at targets of opportunity instead.

The forward observers and fire support officers jammed communication nets, and the artillery battalion could not keep up with competing requests for fire. As a result, the battalion FDC was late in processing and firing some missions and had to ignore many others. By the time the FDC fired the ones it could, the enemy had already passed through the area. The unit delivered ineffective indirect fires throughout the area of operations, and the fire support personnel were unable to concentrate fires at the point of decision.

In another operation, during a deliberate attack, the direct support artillery battalion received 167 planned targets. Although these targets covered the objectives and the enemy's positions, the artillery fight was only marginally effective.

The battle started with a planned preparation of 1,092 rounds fired on an intermediate objective in support of the maneuver forces. The preparation successfully destroyed one enemy vehicle and 10 dismounted soldiers and forced one tank to move. But because the maneuver forces were not in position to launch their assault as the preparation ended, the enemy forces were able to recover and slow the attacking force.

As the battle progressed, fire support personnel fired on 26 targets of opportunity instead of following the plan. As a result of the large number of planned targets, nobody knew what the fire support plan was or which target to fire on next. Communication nets were again jammed with competing requests for fire.

Because of the resulting confusion and the delays in processing missions, screening smoke was fired between friendly echelons rather than in front of the lead company, as was intended. Observers fired several missions close to friendly forces and caused some casualties. Although artillery fires destroyed five enemy vehicles in various locations across the front, the fires did not suppress and isolate the objective. If the observers had been able to concentrate their fires on one enemy flank platoon, destroying its five vehicles instead of the five scattered ones, the friendly infantry and armored forces could have maneuvered on this flank to defeat the enemy in detail.

A few well-placed targets, therefore, are more effective than too many planned targets. Maneuver commanders can then receive fires at the right time and place on the ground for the best effect. This then becomes the fire plan and not a target list.

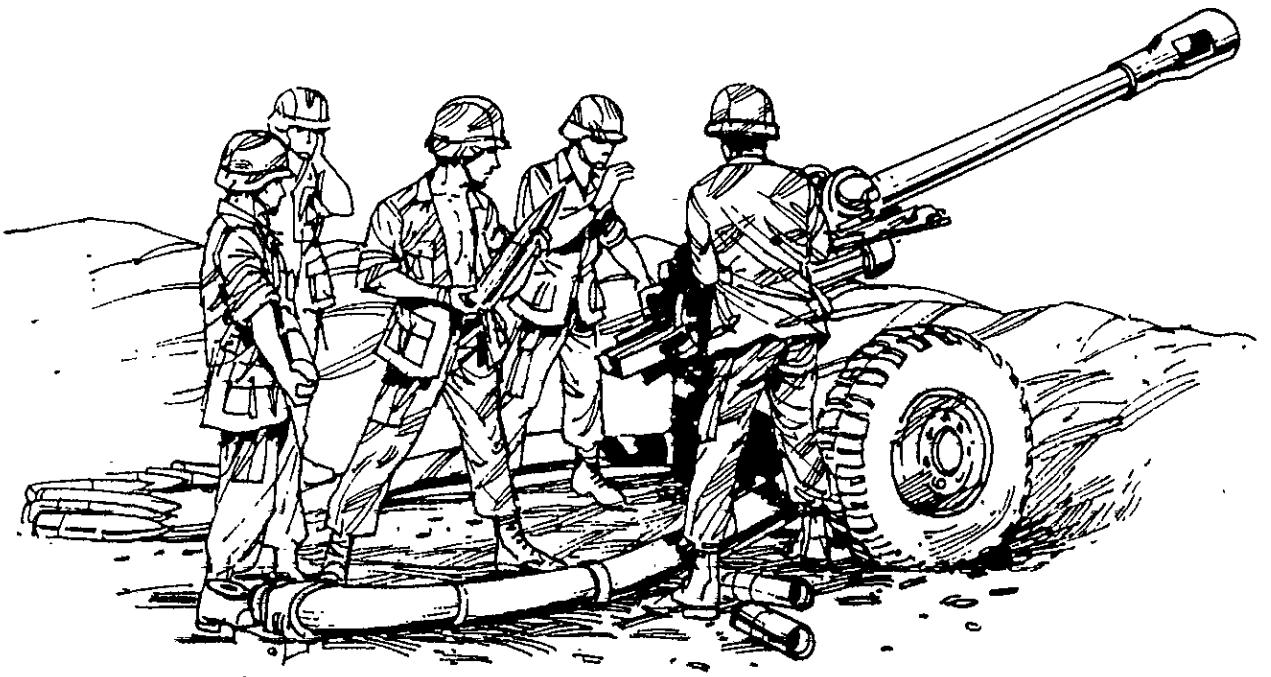
Commanders cannot achieve synchronized training, however, by allowing only the brigade, battalion, or company fire support teams to participate in maneuver training. Entire artillery units must participate. Fire support teams, training alone or without the full participation of supporting units, will never know whether their fire support plans can support the maneuver commander's plan.

INEFFECTIVE

Another problem is that because training is segregated, artillerymen often leave mortars out of their fire support plans or do not adequately define mortar targets or tasks. Even when fire support personnel do specify mortar targets or tasks, the mortar platoons usually do not shoot at the targets or accomplish the tasks. Mortar fires are therefore ineffective. Records show that in 18 percent of the battles fought at the NTC, mortars do not fire even a single round. At other times, when they do fire, their fires are either inaccurate or they fail to support maneuver actions on the ground. And as the maneuver forces surge ahead, maneuver commanders and fire support personnel often leave mortars behind and out of range.

Another aspect of fire support, close air support, is not usually well integrated into the battles at the NTC. Army personnel, during these battles, use close air support aircraft only when they show up or not at all, because Army personnel do not routinely integrate CAS into their overall plans.

The reason for this is that Army and Air Force units also train separately. It is a unique experience when CAS aircraft take part in routine training. It is also the exception rather than the rule when an S-3 Air requests planned CAS for an upcoming battle. Maneuver and fire support personnel almost never select specific targets, munitions, or areas of engagement for CAS aircraft.



In the cases where CAS is used successfully at the NTC, that success can be attributed to careful planning. The planners design airspace coordination areas to allow the simultaneous engagement of all weapon systems while allowing a relatively safe area for aircraft to maneuver in. Air liaison officers (ALOs) direct aircraft to engage specific targets. Commanders, FSOs, S-3 Airs, and ALOs plan to use CAS during specific phases or times in the battle. To use CAS effectively, all elements of the combined arms team must participate in training.

The use of "notional" units also diminishes the realism of play and fosters the development of unrealistic plans. Statistics at the NTC show that the number of missions artillery and mortar units execute increases as the percentage of notional play increases. Maneuver commanders therefore develop false impressions of what artillery and mortar units can do. When problems develop, maneuver commanders blame their supporting artillery units rather than their own unrealistic plans.

So long as fire support plans are not actually fired and firing units remain notional, there will be a lack of synchronization when it comes to realistic force-on-force play or during live fire exercises, and fires will not be supportive.

REASONS

Unfortunately, many FSOs are not well trained, for several reasons:

- Maneuver commanders do not get positive feedback for successful indirect fire missions in training exercises. Even when they work with their fire support officers to develop and execute good fire support plans, the resulting casualties often are not assessed. And when they are assessed, it takes too long to get the assessment processed and the numbers taken out on the ground. In fact, by the time indirect fire assessments have been processed, often the battles have moved to other areas or are already concluded by direct fire.

The NTC, with its technologically advanced marking and damage assessment system, comes closest to providing a realistic fire marking and damage environment, but commanders still do not get positive feedback for successful indirect fires. They therefore end up delegating fire support planning and execution to their fire support officers and offer little or no guidance.

- Suppression by artillery and mortar rounds is not easy to demonstrate in training. The explosive effect of real 155mm or 107mm rounds is quite different from that of artillery and grenade simulators, and individual soldiers react differently to simulators. As a result, maneuver commanders spend their time on other tasks, and their fire support officers remain untrained.
- When units simulate battle damage assessments during operations, many assessments take place out of sight of the maneuver commander, who is usually concentrating on the close-in battle. He therefore does not realize the positive effects of counterfire or deep fires. Unit training scenarios are rarely flexible enough to incorporate the positive effects of these types of fires. And again, because commanders do not know the full effect of their indirect fires, they devote their time to other things.

There are several solutions to these various problems. Some of them are simple; others involve major changes in the way the Army traditionally trains:

First, there must be more combined arms training. This means more than sending forward observers to the field to support maneuver forces. Artillery battalions, down to the gun section level, should participate in maneuver training.

To realistically duplicate real estate management, multiechelon coordination, and the time it takes to prepare batteries to fire, we need to avoid established firing points and shoot some of our live ammunition in support of maneuver operations. Maneuver forces need to see the rounds and experience the time it takes to get them on targets. Although units have a limited amount of training ammunition, the intelligent use

of what they do have can help maneuver commanders learn first-hand what artillery support really is.

For further realism, CAS can be added, but only if the planners request it through the proper channels. If battle planners request CAS properly, and if it makes tactical sense, it should be used.

Situational training should be emphasized over static training. Maneuver forces can practice small arms firing while the artillery forward observers fire artillery rounds in support of a realistic scenario. Combined arms ARTEPs should be conducted, not just artillery, armor, infantry, and air defense. The maneuver brigade may be the best focal point for all training in the field as well as in garrison. The division artillery would still provide quality control for the artillery.

Maneuver should be integrated into artillery training as well as artillery into maneuver training. Maneuver doctrine, battery defense, weapon skills, and patrolling are only some of the things maneuver forces could teach artillerymen.

At the same time, artillery units could teach the maneuver forces mortar skills and how to call for indirect fire. Artillerymen could also teach maneuver leaders fire support doctrine and the capabilities and limitations of their fire support systems. Training synchronization would improve, not only from knowledge but also from a closer working relationship.

In all exercises, notional play should be limited. If a system or unit is not present, it should not be included in the play. If units require notional play but the ammunition is not available, the notional units still should be required to exercise all the necessary actions, just as if they were firing real rounds.

CAPABILITIES

Commanders must make sure that notional play realistically represents a unit's actual capabilities and that the units stay within realistic rates of fire and ammunition expenditure. If players on notional systems fail to include the appropriate actions, controllers should reduce the effects of the rounds they fire accordingly. Otherwise, units will not achieve unity of effort and they will learn the wrong lessons.

All aspects of operations must be analyzed and evaluated. One technique that accomplishes this is the after-action review (AAR). To be sure an AAR covers an entire operation, the maneuver commander can key in on the battlefield operating systems (intelligence, maneuver, fire support, mobility and countermobility, NBC, air defense, command and control, and combat service support).

To be certain that the units are given a realistic review of their operations, the observers should be from outside the chain of command, and commanders at the next higher level should supervise the AARs. An AAR should be a learning experience, not a test.

Maneuver commanders must be taught what the artillery can do, and fire supporters at all levels must demand a clearly stated intent from maneuver commanders. The fire support plan must be an extension of the maneuver commander's plan.

Units that conduct fire support well must be rewarded. If the artillery is on target and destroys the enemy before the direct fight, the battle should be ended there and considered successful.

SUMMARY

In summary, if units synchronize their training, they can achieve synchronization in battle as well. Maneuver and artillery units can no longer train separately. For total understanding, artillery units need to fire artillery rounds in view of maneuver forces.

The Army needs to conduct combined arms ARTEPs to train all units in synchronized operations. Brigades must train as they will fight—as combined arms organizations. Artillery battalions must include maneuver forces in their training, and maneuver forces must include artillery battalions in their training.

Officers of all branches need to develop more of a combined arms mentality, and notional assumptions must be limited during training. If notional play is required, it must be well planned so that it will be as realistic as possible.

Command involvement in training is the only way to be sure fire support is adequately planned and realistically executed. The training of artillery units is too often inadequately synchronized with infantry and armor units. As a result, their fires are not as effective as they should be.

If we fail to correct the problems we have with synchronization, we can expect defeat on the battlefield—or, at best, a higher cost for each victory. To survive, we must train today as we expect to fight.

Captain Peter A. Hansen, a Field Artillery officer, is a combat trainer assigned to the Operations Group at the National Training Center. He has served in battery and staff assignments in the 5th Infantry Division at Fort Polk and the 1st Armored Division in Germany.